

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
 STATEMENT BY APPLICANT**

Date Submitted: February 11, 2005

(use as many sheets as necessary)

Complete If Known 1524296

Application Number Unassigned (PCT/KR03/001504)
 Filing Date 02/11/2005
 First Named Inventor Sung III KANG
 Group Art Unit 2661
 Examiner Name Unassigned
 Attorney Docket Number 033067-0110

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code* (if known)			

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ²
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
	A1	JP	8-346	A	Shiseido Co. Ltd.	01-09-1996		
	A2	JP	9-285336	A	YOSHINO KOGYOSHO CO. LTD.	11-04-1997		
	A3	JP	10-192044	A	Shiseido Co. Ltd.	07-28-1998		
	A4	KR	2000-8990	U	Pacific Corp.	05-25-2000		

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²

Examiner Signature

/Robin Hylton/ (05/05/2009)

Date Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /RH/

* NOTICES *

JPO and INPIT are not responsible for any damages caused by the use of this translation.

- 1.This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.*** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application]This invention relates to the compact receptacle holding volatile cosmetics, and especially volatilizes from the cosmetics of a package body, and solvents which dewed the top panel of the lid, such as moisture and oil, are related with the compact receptacle which can prevent falling easily on the surface of cosmetics.

[0002]

[Description of the Prior Art]In recent years, the cosmetics containing many solvents, such as moisture and oil, have won popularity from good [of the using feeling], and it is held at the compact receptacle in which this kind of cosmetics improved airtightness, and has come to be commercialized. However, the solvent which, as for such cosmetics, the solvent volatilized easily by one side, and volatilized inside the container contacted the lid top panel, and dewed on the surface, and there was a problem that this fell easily on the surface of cosmetics (dew condensation lappet), formed the silverfish of a dew condensation lappet on the surface of cosmetics, and spoiled a fine sight greatly.

[0003]As the conventional method of preventing this dew condensation lappet, the compact receptacle as shown in JP,7-184717,A is proposed. This compact receptacle is more specifically attached to the top panel of a lid between the cosmetics and the lid which held the desiccant to the package body. A solvent is prevented from this desiccant incorporating the solvent which volatilized from cosmetics, and dewing within a compact receptacle.

[0004]

[Problem(s) to be Solved by the Invention]Since this conventional compact receptacle exposed the desiccant between cosmetics and a lid and is attached to it, While the solvent which volatilizes upwards could be efficiently incorporated from cosmetics, the desiccant needed to be formed in the sheet shaped, it needed to attach to the top panel of a lid, the desiccant was exposed to the lid, and there was a problem of injuring a fine sight.

[0005]Then, without using a desiccant, the purpose of this invention processes dew condensation of the top panel of a lid, and there is in proposing the compact receptacle which can maintain a fine sight.

[0006]

[Means for Solving the Problem]While this invention has a package body and a lid holding cosmetics containing a volatile solvent, constitutes this lid from an outer casing and an inner package board and

providing dew condensation space between these outer casings and an inner package board, When said lid is closed, a dew condensation lappet prevention compact receptacle which provided a vent which opens for free passage between container space formed between an inner package board and a package body and said dew condensation space was proposed, and an aforementioned problem is solved.

[0007]

[Embodiment of the Invention]The example of the compact receptacle concerning this invention is described using figures. The perspective view of the compact receptacle which requires drawing 1 for the 1st example, and drawing 2 are the sectional side elevations of the compact receptacle concerning the 1st example.

[0008]As shown in drawing 1 and drawing 2, compact receptacle A comprises the lid 2 which keeps airtight the package body 1 and this package body 1, and is molded with synthetic resins, such as polypropylene, respectively. The hinge regions 1a and 2a are formed in the end of these package bodies 1 and the lid 2, and both are pivoted by letting the rotating shaft 3 pass among both. The engaging projection 1b and engaging pawl 2b are formed, and both can engage with the other end of these package bodies 1 and the lid 2, when the lid 2 is rotated and it puts on the package body 1, and to it, they can maintain the closed state of compact receptacle A.

[0009]As for the package body 1, the crevice 4 of a flat-surface abbreviation square is formed in the center. This crevice 4 is filled up with the cosmetics K, such as foundation, for example, and these cosmetics K have volatility in it, including a solvent mostly.

[0010]The whole surface constitutes the appearance of compact receptacle A, and the lid 2 comprises the cosmetics K of the package body 1, and an inner package board 2B which counters, when it is fixed to the top panel side of the outer casing 2A formed in one, and this outer casing 2A and the hinge region 2a and engaging pawl 2b of said lid 2 close the lid 2. That is, the upper surface 2c of the outer casing 2A is exposed as appearance of compact receptacle A, the dew condensation space S1 is formed between 2 d of undersurfaces of the outer casing 2A, and the upper surface 2e of inner package board 2B, and the container space S0 is formed between 2 f of undersurfaces of inner package board 2B, and the surface of the cosmetics K.

[0011]The opening of two or more vents H1 is carried out to matrix form at inner package board 2B, and the above mentioned dew condensation space S1 and the container space S0 are opened for free passage. The piece 2h of a set-up is formed in the upper surface of the edge part 2g of inner package board 2B.

[0012]The annular gasket 5 is inserted in the circumference of edge part 2g of inner package board 2B. The annular gasket 5 is an elastic body of the section L type which is formed by the rubber material etc. which are rich in elasticity, and has the piece 5a of a set-up, and the flange 5b. this annular gasket 5 is a somewhat bigger annular solid than the crevice 4 holding the cosmetics K of the package body 1, and when it closes the lid 2, it is stuck to the package body 1 of the periphery edge of the crevice 4 by pressure so that the crevice 4 may be surrounded.

[0013]This annular gasket 5 has structure fixed to the lid 2, when the flange 5b of the annular gasket 5 is held down, and the edge part 2g of inner package board 2B carries out ultrasonic welding of the piece 2h of a set-up of inner package board 2B to undersurface 2b of the outer casing 2A and pastes up.

[0014]Next, a dew condensation lappet prevention operation of this compact receptacle A is explained. If compact receptacle A is put on the high place of atmospheric temperature, solvents, such as water and oil, will volatilize from the cosmetics K in a container, and it will be full of this solvent that volatilized in compact receptacle A kept airtight by the annular gasket 5. And if atmospheric temperature becomes

low and compact receptacle A is cooled, the solvent which volatilized will contact and dew a part of lid 2 where temperature became low, and much waterdrop will arise.

[0015]At this time, the solvent which volatilized advances also into the dew condensation space S1 not only through the container space S0 but through the vent H1. That is, the solvent which volatilized will contact and dew 3rd [a total of] page, 2 d of undersurfaces of the outer casing 2A, the upper surface 2e of inner package board 2B, and 2 f of undersurfaces of inner package board 2B. For this reason, compact receptacle A will have an about 3-time dewing surface product compared with the usual compact receptacle which is a board with an independent lid.

[0016]For this reason, if the volatilizing solvent is a constant rate, the solvents which dew 2 f of undersurfaces of inner package board 2B which produces the problem of a dew condensation lappet will decrease in number about to 1/3 compared with the conventional compact receptacle. The solvent in which it remained and two thirds volatilized dews 2 d of undersurfaces of the outer casing 2A which constitutes the dew condensation space S1, and the upper surface 2e of inner package board 2B, and waterdrop cannot fall easily on the cosmetics K from this dew condensation space. For this reason, the dew condensation which falls on the surface of the cosmetics K can be decreased relatively, and it has, and becomes a compact receptacle which is hard to produce a dew condensation lappet.

[0017]In order for the upper surface 2c to touch the open air especially with the outer casing 2A directly and to tend to influence it by a temperature change compared with inner package board 2B, The solvent which volatilized dews 2 d of undersurfaces of the outer casing 2A easily, for this reason, a lot of solvents are made to dew in the dew condensation space S1, and fear of the dew condensation lappet in the container space S0 will become small.

[0018]Drawing 3 is an explanatory view showing other examples of composition of a vent provided in an inner package board. The Drawing (a) and (b) shows the sectional side elevation of inner package board 2B. [both] The figure (a) The bank 6 which became high one step is established in the opening periphery of the vent H2 upper part, and even if a solvent collects on the upper surface 2e of inner package board 2B, it is considered as the structure where waterdrop cannot fall easily on the surface of the cosmetics K from the vent H2.

[0019]The figure (b) The upper part forms the inner surface 7 of the vent H3 in the tapered shape used as a byway, the opening of the upper surface 2e of inner package board 2B is made small, and it is considered as the structure where the solvent on inner package board 2B cannot fall easily too. In addition to these constructional examples, it can also be considered as the structure of forming drains, such as a slot for returning again the solvent returned to the fluid to the cosmetics K, in a part of lid 2.

[0020]Drawing 4 and drawing 5 are the perspective views of the compact receptacle in which other examples of shape of a vent provided in an inner package board are shown. The vent H4 shown in drawing 4 has slit shape, and forms two or more vents H4 radiately from the center of inner package board 2B. The vent H5 shown in drawing 5 has slit shape similarly, and it forms it in inner package board 2B so that two rows may be made to arrange in parallel two or more vents H5. As mentioned above, as the example was shown, the design of an inner package board can be changed by changing the shape of a vent, and arrangement variously.

[0021]The 2nd example of the invention in this application is described using drawing 6. The figure is a sectional side elevation of the compact receptacle concerning the 2nd example. Compact receptacle B of this example attached the inner package board 12B by the center portion to the outer casing 12A. The same structure as the 1st example attaches the same number, and uses the explanation (the following and

other examples are the same).

[0022]When an interval is set, it is fixed to the top panel side of the hinge region 12a which engages with the package body 1, the outer casing 12A by which the engaging pawl 12b was formed in one, and this outer casing 12A and the lid 12 of this example closes the lid 12, it comprises the cosmetics K of the package body 1, and the inner package board 12B which counters. The upper surface 12c of the outer casing 12A is exposed as appearance of compact receptacle B, the dew condensation space S1 is formed between 12 d of undersurfaces of the outer casing 12A, and the upper surface 12e of inner package board 2B, and the container space S0 is formed between 12 f of undersurfaces of the inner package board 12B, and the surface of the cosmetics K.

[0023]The inner package board 12B is attached to the outer casing 12A by attaching 12 h of annular projections formed in the center of the upper surface 12e outside 12 g of fixing projections formed in the center of 12 d of undersurfaces of the outer casing 12A, and fixing. An interval arises between the outer casing 12A and the inner package board 12B with the height of 12h of this annular projection, and 12 g of fixing projections, and the dew condensation space S1 is formed here. The vent H6 is formed between the outer casings 12A, and it has become a periphery of the inner package board 12B with the structure where this vent H6 opens the dew condensation space S1 and the container space S0 for free passage.

[0024]The annular gasket 15 is being fixed to the outer casing 12A so that the inner package board 12B may be surrounded. this annular gasket 15 is a somewhat bigger annular solid than the crevice 4 holding the cosmetics K of the package body 1, when it closes the lid 12, is stuck to the package body 1 of the periphery edge of the crevice 4 by pressure so that the crevice 4 may be surrounded, and maintains the airtightness of the container space S0 and the dew condensation space S1 at it.

[0025]According to compact receptacle B of the 2nd example constituted as mentioned above, since the vent H6 is formed in the circumference of the inner package board 12B, when the lid 12 is opened, 12 f of undersurfaces of the inner package board 12 which appears outside can be made into an even field, it can have them, and the compact receptacle excellent in the fine sight can be constituted.

[0026]This compact receptacle B has a small touch area of the inner package board 12B and the outer casing 12A compared with compact receptacle A of the 1st example. Therefore, even if the outdoor air temperature of compact receptacle B changes, since the temperature does not change compared with the outer casing 12A, the inner package board 12B can be made into the structure of being hard to dew on the undersurface 12f of the inner package board 12B which counters with the surface of cosmetics and the problem of a dew condensation lapet produces.

[0027]The 3rd example of the invention in this application is described below using drawing 7. The figure is a sectional side elevation of the compact receptacle concerning the 3rd example. Compact receptacle C of this example is characterized by making the inner package board of a lid engage with the package body side.

[0028]The lid 22 of compact receptacle C comprises the outer casing 22A which constitutes the appearance of compact receptacle C, and the inner package board 22B which formed in one the hinge region 22a and the engaging pawl 22b which engage with the package body 1. For this reason, when the upper surface 22c of the outer casing 22A was exposed as appearance of compact receptacle C and the upper surface 22e of the inner package board 22B is dented in part, The dew condensation space S1 is formed between 22 d of undersurfaces of the outer casing 22A, and the container space S0 is formed between 22 f of undersurfaces of the inner package board 22B, and the surface of the cosmetics K. These dew condensation space S1 and the container space S0 are opened for free passage by two or

more vents H1 which punched the inner package board 22B.

[0029]By fixing the annular gasket 25 to the periphery of the crevice 4 of the package body 1, and closing the lid 22 in this compact receptacle C, The upper bed of the annular gasket 25 is stuck to 22 f of undersurfaces of the inner package board 22B of the lid 22 by pressure, and has structure which maintains the airtightness of the container space S0 and the dew condensation space S1.

[0030]According to compact receptacle C of this example, the function as a lid can be given to the inner package board 22B side, and it can separate from functions, such as flexibility required of the appearance nature and the hinge region 22a of an outer casing, or the engaging pawl 22b writing with the structure of attaching the outer casing 22A to this inner package board 22B. For example, after giving a special ornament to the outer casing 22A, this can be attached to the inner package board 22B, and the lid 22 can be constituted, or it can constitute from different construction material from the inner package board 22B, and the compact receptacle in consideration of decoration nature can be constituted.

[0031]Although any example which explained above made shape of the compact receptacle the quadrangle, of course, various shape, such as a round shape and an ellipse form, can be chosen. In these examples, although cosmetics were made into the structure directly held to the crevice established in the package body, it is good also as a structure which fixed the makeup pan to the package body side dismountable.

[0032]

[Effect of the Invention]By the compact receptacle of this invention constituting a lid with an outer casing and an inner package board, providing dew condensation space among both, and making a dewing surface product increase, Since the quantity of the solvent which dews the undersurface of an inner package side which counters cosmetics and directly and produces the problem of a dew condensation lappet can be pressed down low, a possibility that the solvent which dewed on the surface of cosmetics may fall can be decreased relatively. Simultaneously, since a moisture absorption material is not exposed to the top panel of a lid compared with the conventional compact receptacle, it can be considered as the compact receptacle excellent in the fine sight.

[Translation done.]